

I claim:

1. A composition comprising a plurality of cells including isolated human dendritic cells and tumor/B-cell hybrid cells wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
2. The composition of claim 1 wherein the human dendritic cells and tumor/B-cell hybrid cells were obtained from the same individual.
3. A composition comprising isolated human dendritic cells wherein the dendritic cells have been contacted with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen, wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
4. The composition of claim 3 wherein the human dendritic cells and tumor/B-cell hybrid cells were obtained from the same individual.
5. A method of generating dendritic cells contacted with tumor/B-cell hybrid cells comprising :
  - a) providing isolated human dendritic cells; and
  - b) contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen.
6. The method of claim 5 wherein the human dendritic cells and tumor/B-cell hybrid cells were obtained from the same individual.
7. The method of claim 5 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
8. The method of claim 5 comprising the additional step:
  - c) introducing a therapeutically effective amount of the dendritic cells into an individual in need of such cells.

9. The method of claim 8 wherein the introducing is by intra-lymph node injection.
10. A composition comprising a plurality of cells including isolated human CD8<sup>+</sup> cells and tumor/B-cell hybrid cells.
11. The composition of claim 10 wherein the human CD8<sup>+</sup> cells and tumor/B-cell hybrid cells were obtained from the same individual.
12. The composition of claim 10 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
13. The composition of claim 10 wherein the CD8<sup>+</sup> cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
14. A composition comprising isolated human CD8<sup>+</sup> cells wherein the CD8<sup>+</sup> cells have been contacted with tumor/B-cell hybrid cells for a sufficient time to stimulate proliferation CD8<sup>+</sup> cells that recognize tumor antigens.
15. The composition of claim 14 wherein the human CD8<sup>+</sup> cells and tumor/B-cell hybrid cells were obtained from the same individual.
16. The composition of claim 14 wherein the CD8<sup>+</sup> cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
17. The composition of claim 14 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.

18. A method of generating CD8<sup>+</sup> cells contacted with tumor/B-cell hybrid cells comprising:
  - a) providing isolated human CD8<sup>+</sup> cells;
  - b) contacting the CD8<sup>+</sup> cells with tumor/B-cell hybrid cells for a sufficient time to stimulate proliferation CD8<sup>+</sup> cells that recognize tumor antigens.
19. The method of claim 18 wherein the human CD8<sup>+</sup> cells and tumor/B-cell hybrid cells were obtained from the same individual.
20. The method of claim 18 wherein the human CD8<sup>+</sup> cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
21. The method of claim 18 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
22. The method of claim 18 comprising the additional step:
  - c) introducing a therapeutically effective amount of the CD8<sup>+</sup> cells into an individual in need of such cells.
23. The method of claim 22 wherein the introducing is selected from the group consisting of intratumoral injection, intra lymph node injection, intraperitoneal infusion, intrapleural infusion, intrathecal infusion, and intravenous infusion.
24. A composition comprising a plurality of cells including isolated human T-Cells and tumor/B-cell hybrid cells.
25. The composition of claim 24 wherein the human T-Cells and tumor/B-cell hybrid cells were obtained from the same individual.

26. The composition of claim 24 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
27. The composition of claim 24 wherein the human T cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
28. A composition comprising isolated human T-Cells wherein the T-Cells have been contacted with tumor/B-cell hybrid cells for a sufficient time to stimulate proliferation human of T-Cells that recognize tumor antigens.
29. The composition of claim 28 wherein the human T-Cells and tumor/B-cell hybrid cells were obtained from the same individual.
30. The composition of claim 28 wherein the human T cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
31. The composition of claim 28 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
32. A method of generating human T-Cells contacted with tumor/B-cell hybrid cells comprising:
  - a) providing isolated human T-Cells;
  - b) contacting the T-Cells with tumor/B-cell hybrid cells for a sufficient time to stimulate proliferation of T-Cells that recognize tumor antigens.

33. The method of claim 32 wherein the human T-Cells and tumor/B-cell hybrid cells were obtained from the same individual.
34. The method of claim 32 wherein the human T cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
35. The method of claim 32 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
36. The method of claim 32 comprising the additional step:
  - c) introducing a therapeutically effective amount of the T-Cells into an individual in need of such cells.
37. The method of claim 36 wherein the introducing is selected from the group consisting of intratumoral injection, intra lymph node injection, intraperitoneal infusion, intrapleural infusion, intrathecal infusion, and intravenous infusion.
38. A composition comprising a plurality of cells including isolated human CD25<sup>+</sup> T-Cells and tumor/B-cell hybrid cells.
39. The composition of claim 38 wherein the human CD25<sup>+</sup> T-Cells and tumor/B-cell hybrid cells were obtained from the same individual.
40. The composition of claim 38 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
41. The composition of claim 38 wherein the human CD25<sup>+</sup> T cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the

dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.

42. A composition comprising isolated human CD25<sup>+</sup> T-Cells wherein the CD25<sup>+</sup> T-Cells have been contacted with tumor/B-cell hybrid cells for a sufficient time to stimulate proliferation of human CD25<sup>+</sup> T-Cells that recognize tumor antigens.
43. The composition of claim 42 wherein the human CD25<sup>+</sup> T-Cells and tumor/B-cell hybrid cells were obtained from the same individual.
44. The composition of claim 42 wherein the human CD25<sup>+</sup> T cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
45. The composition of claim 42 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
46. A method of generating human CD25<sup>+</sup> T-Cells contacted with tumor/B-cell hybrid cells comprising:
  - a) providing isolated human CD25<sup>+</sup> T-Cells;
  - b) contacting the T-Cells with tumor/B-cell hybrid cells for a sufficient time to stimulate proliferation of T-Cells that recognize tumor antigens.
47. The method of claim 46 wherein the human CD25<sup>+</sup> T-Cells and tumor/B-cell hybrid cells were obtained from the same individual.
48. The method of claim 46 wherein the human CD25<sup>+</sup> T cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.

49. The method of claim 46 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
50. The method of claim 46 comprising the additional step:
  - c) introducing a therapeutically effective amount of the CD25<sup>+</sup> T-Cells into an individual in need of such cells.
51. The method of claim 50 wherein the introducing is selected from the group consisting of intratumoral injection, intra lymph node injection, intraperitoneal infusion, intrapleural infusion, intrathecal infusion, and intravenous infusion.
52. A composition comprising a plurality of cells including isolated human CD25<sup>+</sup> T-Cells and tumor/B-cell hybrid cells.
53. The composition of claim 52 wherein the human CD25<sup>+</sup> T-Cells and tumor/B-cell hybrid cells were obtained from the same individual.
54. The composition of claim 52 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
55. The composition of claim 52 wherein the human CD25<sup>+</sup> T cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
56. A composition comprising isolated human CD25<sup>+</sup> T-Cells wherein the CD25<sup>+</sup> T-Cells have been contacted with tumor/B-cell hybrid cells for a sufficient time to stimulate proliferation of human CD25<sup>+</sup> T-Cells that recognize tumor antigens.
57. The composition of claim 56 wherein the human CD25<sup>+</sup> T-Cells and tumor/B-cell hybrid cells were obtained from the same individual.

58. The composition of claim 56 wherein the human CD25<sup>+</sup> T cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
59. The composition of claim 56 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
60. A method of generating CD25<sup>+</sup> T-Cells contacted with tumor/B-cell hybrid cells comprising:
  - a) providing isolated human CD25<sup>+</sup> T-Cells;
  - b) contacting the T-Cells with tumor/B-cell hybrid cells for a sufficient time to stimulate proliferation of T-Cells that recognize tumor antigens.
61. The method of claim 60 wherein the human CD25<sup>+</sup> T-Cells and tumor/B-cell hybrid cells were obtained from the same individual.
62. The composition of claim 60 wherein the human CD25<sup>+</sup> T cells were obtained from an individual treated by providing isolated human dendritic cells, contacting the dendritic cells with tumor/B-cell hybrid cells for a sufficient time to load the dendritic cells with tumor antigen; and introducing a therapeutically effective amount of the dendritic cells into the individual.
63. The method of claim 60 wherein the tumor/B-cell hybrid cells were generated by fusing tumor cells dissociated from a tumor by mechanical dissociation with a highly enriched population of human B-cells.
64. The method of claim 60 comprising the additional step:
  - c) introducing a therapeutically effective amount of the CD25<sup>+</sup> T-Cells into an individual in need of such cells.



65. The method of claim 64 wherein the introducing is selected from the group consisting of intratumoral injection, intra lymph node injection, intraperitoneal infusion, intrapleural infusion, intrathecal infusion, and intravenous infusion.
66. A method of slowing or inhibiting cancer growth comprising administering to an individual in need thereof an effective amount of human dendritic cells contacted in vitro with TBH cells.
67. A method of slowing or inhibiting cancer growth comprising administering to an individual in need thereof an effective amount of human CD8<sup>+</sup> cells contacted in vitro with TBH cells.
68. A method of slowing or inhibiting cancer growth comprising administering to an individual in need thereof an effective amount of human T-Cells contacted in vitro with TBH cells.
69. A method of slowing or inhibiting cancer growth comprising administering to an individual in need thereof an effective amount of human CD25<sup>-</sup> T-Cells contacted in vitro with TBH cells.
70. A method of lowering or inhibiting side effects of an immunotherapy comprising administering to an individual in need thereof an effective amount of human CD25<sup>+</sup> cells contacted in vitro with TBH cells.
71. A method of lowering or inhibiting side effects of an immunotherapy comprising administering to an individual in need thereof an effective amount of human CD25<sup>+</sup> cells contacted in vitro with TBH cells, wherein the immunotherapy is any one of the method of claims 66, 67, 68, or 69.
72. A kit for generating TBH cells comprising a reagent for fusing cells and a reagent for isolating B-cells.
73. A kit for generating TBH exposed human dendritic cells comprising a reagent for fusing cells, a reagent for isolating B-cells, and a reagent for isolating dendritic cells.

74. A kit for generating TBH exposed human CD8<sup>+</sup> cells comprising a reagent for fusing cells, a reagent for isolating B-cells and a reagent for isolating CD8<sup>+</sup> cells.
75. A kit for generating TBH exposed human T-Cells comprising a reagent for fusing cells, a reagent for isolating B-cells and a reagent for isolating T-Cells.
76. A kit for generating TBH exposed human CD25<sup>-</sup> T-Cells comprising a reagent for fusing cells, a reagent for isolating B-cells and a reagent for isolating CD25<sup>-</sup> T-Cells.
77. A kit for generating TBH exposed human CD25<sup>+</sup> T-Cells comprising a reagent for fusing cells, a reagent for isolating B-cells and a reagent for isolating CD25<sup>+</sup> T-Cells.